

SEP 12 2008

1

Amendment to Claims

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A method of managing facilities data, the method being executable by a host computer system comprising:

7 receiving a first graphical element comprising a computer aided design (CAD) element
8 entered by a user, area or sub area entered by a user to as an image displayed on a
9 monitor of a first computer system; and

10 displaying a graphical user interface on the monitor of the first computer system, wherein
11 the graphical user interface is configured to:

12 receive non—graphical information associated with the first graphical element
13 element including a first component specification, and

14 link information for at least one component specification to a second component
15 specification and the ~~CAD element, area or sub—area graphical element~~ by
16 generating link data associated with the ~~CAD graphical~~ element and component
17 specifications, the at least one component specification including the first
18 component specification;

19 receiving the first component specification into the graphical interface, the first
20 component specification comprising at least one non-graphical data element
21 element representing a physical or functional attribute and at least one data
22 element representing a non-physical and non-functional attribute into the
23 graphical user interface;

24 generating link data associated with the first graphical element and the first
25 component specification; and

26 the first computer system transmitting said link data and said first component
27 specification including the non—graphical data element element and said data
28 element representing the non—physical and non-functional attribute as a data unit
to a database for storage via internet communication by the first computer
system.₂₅

- 1
- 2 2. (Previously Presented) The method of claim 1 wherein the first computer system comprises a
3 CAD computer system and wherein the CAD element is a first CAD graphical element, the first
4 graphical element comprising the first CAD graphical element.
- 5
- 6 3. (Previously Presented) The method of claim 1 wherein the graphical user interface comprises a
7 plurality of fields, wherein the first component specification comprises a plurality of non—
8 graphical information components, and wherein entering the first component specification into
9 the graphical user interface comprises entering the plurality of non—graphical information
components into the plurality of fields of the graphical user interface.
- 10
- 11 4. (Previously Presented) The method of claim 1 further comprising:
- 12
- 13 the first computer system receiving, via internet communication, component specification list
14 data, wherein specification list data represents a list of specifications displayable on the monitor
15 of the first computer system, wherein each specification of the list represents a data unit stored
16 in the database in data communication with the first computer system, wherein each data unit
17 contains data representing non—graphical information;
- 18
- 19 the first computer system displaying the list of specifications;
20 adding a second graphical element to the image displayed on the monitor of the first computer
system;
- 21 the first computer system transmitting second graphical element data to the database via internet
22 communication, wherein the second graphical element data represents the second graphical
23 element; and
- 24 the first computer system transmitting link data to the database via internet communication,
25 wherein the link data indicates that one of the data units associated with the specifications in the
26 specification list stored in the database is to be linked within the database to the second graphical
27 element data after the second graphical element data is stored in the database.
- 28
5. (Previously Presented) A method of organizing and storing data comprising:
a first computer system receiving, via internet communication, specification list data,

- 1 wherein specification list data represents a list of at least one specification displayable on a
2 monitor of the first computer system, wherein said specification list data includes at least one
3 non-graphical data element representing a physical or functional attribute and at least one data
4 element representing a non—physical or non—functional attribute comprising a data unit for
5 each specification, said specification list data stored in a database in internet communication with
6 the first computer system;
- 7 the first computer system displaying the list of the at least one specifications through a graphical
8 user interface, the graphical user interface configured to:
9 receive non—graphical information associated with a selected graphical element including a
component specification, and
10 link information for at least one component specification to a second component
specification and a computer aided design(CAD) element, area or sub—area; and
11 link information for at least one component specification to a second component specification
12 and the CAD element, area or sub-area, .
- 13 6. (Currently Amended) A method operating a computer system on a processor comprising:
14 a computer system receiving a first graphical element data via internet communication from a
15 first computer system, wherein the first graphical element data represents a first graphical
16 element which is displayable on a monitor of the first computer system, the first graphical
17 element comprising a computer aided design (CAD) element, area or sub area;
18 the computer system storing the first graphical element data into a database in data
19 communication with the computer system;
20 the computer system receiving a data unit and link data and storing within the database the data
21 unit including a first non-graphical data element representing a physical or functional attribute
22 and a data element representing a non-physical or non-functional attribute via internet
23 communication from the first computer system, said non-graphical data element associated with
24 the first graphical element; and
25
26 creating and storing a link within the database between the data unit and the first graphical
27 element and a second data unit, wherein the second data unit stores first non-graphical
28 information data, the link created and stored in response to receiving the link data.
- 29 7. (Previously Presented) The method of claim 6 further comprising:

1 the computer system transmitting the first graphical element data to a second computer system
2 via internet communication; and
3 the computer system transmitting the first non-graphical data unit to the second computer system
4 via internet communication.

5
6 8. (Previously Presented) The method of claim 6 further comprising:
7 the computer system receiving second graphical element data via internet communication from a
8 second computer system, wherein the second graphical element data represents a second
9 graphical element which is displayable on a monitor of the second computer system;
10 the computer system storing the second graphical element data into the database; and
11 creating and storing a link within the database between the second graphical element data and the
12 first data unit after the second graphical element data is stored in the database.

13 9. (original) The method of claim 6 further comprising the computer system sending, via internet
14 communication, list data to the first computer system, wherein the list data represents a list of
15 non-graphical data units in the database, wherein each non-graphical data unit stores non-
16 graphical information data, wherein the list of non-graphical data units includes the first non-
17 graphical data unit.

18 10. (Previously Presented) The method of claim 6 further comprising:
19 the computer system receiving an additional non-graphical data element from a second computer
20 system via internet communication; and
21 the computer system storing the additional non-graphical data element in the first non- graphical
22 data unit.

23
24 11. (Original) The method of claim 6 further comprising the computer system storing the first
25 graphical element data in a first graphical data unit in the database, wherein the first graphical
26 data unit stores additional graphical element data.

27
28 12. (Currently Amended) The method of claim 1 wherein the first non-graphical information data
represents information displayable in fields of an interface, wherein the interface is displayable
on the monitor of the first computer system graphical user interface includes:

1 a first portion in a first window for receiving a selection of a first subset of a CAD project from a
2 collection of graphical elements;
3 a second portion in the first window for receiving a selection of a CAD object associated with
4 the first subset collection;
5 a third portion of the first window for receiving a selection of a component specifications;
6 a fourth portion of the first window for viewing attributes for a selected component
7 specifications; and
8 a mechanism within the first window for linking the selected component specifications to a
9 selected CAD object.

10 13. (Currently Amended) The method of claim 12 wherein the database links the first non
11 graphical data unit in the database to a second non graphical data unit in the database graphical
12 user interface includes:

13 a fifth portion in the first window for viewing component specifications linked to the selected
14 component specification CAD object; and
15 a second mechanism in the first window for creating a new component specifications.

16 14. (Currently Amended) One or more processor readable storage devices memory mediums
17 having processor readable code embodied on said processor readable storage devices memory
18 mediums, said processor readable code for programming a processor to perform a method
19 comprising:

20 21 a computer system receiving a data unit including at least one data element representing a non-
22 graphical data element representing physical or functional attribute and at least one data element
23 representing a non—physical and non—functional attribute via a network interface from a first
24 computer system, the data unit associated with a first graphical element comprising a computer
25 aided design (CAD) element, area or sub-area, the computer system receiving the data unit
26 through a graphical user interface, the graphical user interface configured to:

27 28 receive non-graphical information associated with a selected graphical element including
29 a component specification, and
30 link information for at least one component specification to a second component

1 specification and the CAD element, area or sub-area;
2 generating link data associated with the CAD element and component specifications; and
3 the computer system updating a database with said data unit and said link data, wherein
4 said data unit which includes at least one data element representing a physical or a
5 functional attribute is stored in the database.

6
7 15. (Currently Amended) The method one or more processor readable storage devices of claim
8 14 further comprising:

9 linking said at least one data element representing the physical or the functional attribute within
10 the database to a first graphical element data stored in the database.

11
12 16. (Currently Amended) The method one or more processor readable storage devices of claim
13 15 further comprising the computer system transmitting data representing a first component
14 specification to a second computer system via internet communication, wherein data representing
15 the first component specification comprises data representing non-graphical information,
16 wherein the data representing the first component specification is transmitted after the said step
17 of linking said at least one data element.

18
19 17. (Currently Amended) The method one or more processor readable storage devices of claim
20 16 further comprising the computer system receiving and modifying the non-graphical
21 information displayed in fields of an interface.

22 18. (Currently Amended) A method comprising:
23 a database receiving and storing a first computer aided design (CAD) element data generated by
24 a first computer system in data communication with the database, wherein the first CAD element
25 data represents a first CAD element, area or sub-area displayable on a monitor;
26 the database receiving at least one non-graphical data element representing a physical or
27 functional attribute, a single data unit, and link data between said graphical and non-graphical
28 data units; the database storing, said CAD element, said non-graphical data element(s) and said
link data as a component specification comprising a single data unit, at least one non-graphical
data element representing a physical or functional attribute, and at least one data element

1 representing a non—physical and nonfunctional attribute; and
2 creating a link in the database between the stored first CAD element data and at least one two of
3 a plurality of component specifications stored in the database, wherein the database is configured
4 to link one of the plurality of component specifications to a second of the plurality of component
5 specifications, wherein said step of creating a link is performed in response to receiving the like
6 data.

7 19. (Original) The method of claim 18 wherein the first computer system is coupled to the
8 database via the Internet.
9

10 20. (Withdrawn) A ~~memory storing instructions for instructing a processor to perform a method~~
11 ~~by a first computer system, the method comprising:~~
12 ~~a first computer system displaying a graphical user interface on a monitor of a first computer~~
13 ~~system, wherein the graphical user interface is configured to receive non-graphical information~~
14 ~~associated with a graphical element, the graphical element comprising a computer aided design~~
15 ~~(CAD) element, area or sub-area, the graphical user interface configured to:~~

16 ~~receive non-graphical information associated with said a selected graphical element~~
17 ~~including a first component specification, and~~
18 ~~link information for at least one said first component specification to at least one second~~
19 ~~component specification and the CAD graphical element, area or sub-area;;~~
20 ~~adding a first graphical element to an image displayed on the monitor of the first~~
21 ~~computer system;~~
22 ~~receiving at least one data element representing a physical or functional attribute and at~~
23 ~~least one data element representing a non-physical and non-functional attribute into the~~
24 ~~graphical user interface, wherein said at least one data element representing a physical or~~
25 ~~functional attribute and at least one data element representing a non—physical and non—~~
26 ~~functional attribute are non—graphical data information;~~
27 ~~generating link data associated with the first graphical element and the first component~~
28 ~~specification;~~
~~the first computer system transmitting said non—graphical data information by the first~~
~~computer system to a database for storage as a data unit therein via internet~~

1 communication, wherein said non-graphical data information describes the first
2 graphical element; and
3 the first computer system transmitting first non-graphical information data by the first
4 computer system to the database via internet communication, wherein the first non-
5 graphical information comprises a component specification including at least one data
6 element representing a physical or functional attribute, and at least one data element
7 representing a non-physical and nonfunctional attribute.

8 21. (Withdrawn) The memory of claim 20 wherein the first computer system comprises a CAD
9 computer system and wherein the first graphical element comprises a first CAD graphical
10 element configured to be accessed by a CAD computer system.

11
12 22. (Withdrawn) The memory of claim 20 wherein the graphical user interface comprises a
13 plurality of fields, wherein the first non-graphical information comprises a plurality of non-
14 graphical information components, and wherein entering first non-graphical information into
15 the graphical user interface comprises the plurality of non-graphical information components
16 into the plurality of fields, respectively, of the graphical user interface.

17
18 23. (Withdrawn) The memory of claim 20 wherein the method further comprises:

19 the first computer system receiving, via internet communication, specification list data by the
20 first computer system, wherein specification list data represents a list of specifications
21 displayable on the monitor of the first computer system, wherein each specification of the list
22 represents a data unit stored in the database in data communication with the first computer
23 system, wherein each data unit contains data representing non-graphical information including
24 at least one data element representing a physical or functional attribute, and at least one data
25 element representing a non-physical or non-functional attribute;
26 the first computer system displaying the list of specifications by the first computer system;
27 adding a second graphical element to the image displayed on the monitor of the first computer
28 system;
the first computer system transmitting second graphical element data by the first computer
system to the database via internet communication, wherein the second graphical element data

1 represents the second graphical element; and
2 the first computer system transmitting link data by the first computer system to the database via
3 internet communication, wherein the link data indicates that one of the data units stored in the
4 database is to be linked within the database to the second graphical element data after the second
5 graphical element data is stored in the database.

6
7 24. (Withdrawn) A memory storing instructions for instructing a processor to perform a method
8 by a first computer system, the method comprising:

9 a first computer system receiving, via internet communication, specification list data, wherein
10 specification list data represents at least one specification displayable on a monitor of the first
11 computer system, wherein said specification list data contains at least one non-graphical data
12 element representing a non-physical and non-functional attribute, and at least one data element
13 representing a non-physical and non-functional attribute, said specification list data stored in a
14 database as a data unit in internet communication with the first computer system;

15
16 the first computer system displaying the list of specifications through a graphical user interface,
17 the graphical user interface configured to:

18 receive non-graphical information associated with a selected graphical element including a
19 component specification, and
20 link information for at least one component specification to a second component specification
21 and a computer aided design (CAD) element, area or sub-area;

22
23 the first computer system adding a graphical element to a computer input, the graphical element
24 displayed on the monitor of the first computer system and comprising the CAD element, area or
25 sub-area;

26 the first computer system transmitting graphical element data to the database via internet
27 communication, wherein the graphical element data represents the graphical element; and

28 the first computer system transmitting link data to the database via Internet communication,
wherein the link data indicates that said at least one specification represented by said

1 specification list data stored in the database is to be linked within the database to the graphical
2 element data after the graphical element data is stored in the database.

3

4 25. (Withdrawn) A memory storing instructions for instructing a processor to perform a method
5 by a first computer system, the method comprising:

6

7 a computer system receiving a first graphical element data via internet communication from a
8 first computer system, wherein the first element data represents a first graphical element which is
9 displayable on a monitor of the first computer system and comprising a computer-aided design
(CAD) element, area or sub-area;

10

11 the computer system storing the first graphical element data into a database in data
12 communication with the computer system;

13

14 the computer system receiving link data and receiving and storing within the database a first
15 non-graphical data element representing a physical or functional attribute via internet
16 communication from the first computer system; and

17

18 creating a link within the database between the first graphical element data and a first non-
19 graphical data unit in the database after the first graphical element data is stored in the database,
20 wherein the first non-graphical data unit stores first non-graphical information including at
21 least one data element representing a physical or functional attribute, and at least one data
22 element representing a non-physical or non-functional attribute, the database configured to
23 link the first non-graphical data unit to the first graphical element data and a second graphical
24 data unit in response to receiving the link data and the first non-graphical data element, first
25 graphical element data or second graphical data unit stored to the database by the computer
26 system.

27

28 26. (Withdrawn) A memory storing instructions for instructing a processor to perform a method
by a first computer system, the method comprising:

1 a database receiving and storing first computer aided design (CAD) element data generated by a
2 first computer system in data communication with the database, wherein the first CAD element
3 data represents a first CAD element, area or sub-area displayable on a monitor;
4 the database receiving and storing second CAD element data generated by a second computer
5 system in data communication with the database, wherein the second CAD element data
6 represents a second CAD element displayable on the monitor;
7 the database receiving and storing each of a plurality of component specifications as a data unit,
8 wherein each component specification includes at least one non-graphical data element
9 representing a physical or functional attribute and at least one data element representing a non-
physical and non-functional attribute, each of said non-graphical data elements associated
10 with a CAD element; and
11 creating a link in the database between the stored second CAD element data and one of the
12 plurality of component specifications stored in the database, the database configured to link a
13 first component specification of the plurality of component specifications to the second CAD
14 element data and a second component specification of the plurality of component specifications
15 in response to the first component specification, the second CAD element data, or the second
16 component specification received from the first computer system.

17

18

19

20

21

22

23

24

25

26

27

28